

REMARKS/ARGUMENTS

Claims 1-5, 10, 12-15, 17-20, 22 and 32-33 are currently pending in the application. Claims 23-31 have been withdrawn with traverse as the result of a restriction requirement. Claims 1-5, 10, 12-15, 17-20, 22 and 32-33 were rejected in the final Office Action mailed July 19, 2007 (hereinafter referred to as "Office Action"). It is believed that no fees are due at this time. In view of the following remarks and amendments, applicant respectfully requests a timely Notice of Allowance be issued in this case.

Claim Rejections under 35 U.S.C. § 101

Claims 1-5, 10, 12-15, 17-20, 22 and 32-33 were rejected in the Office Action under 35 U.S.C. § 101 because the claimed invention is allegedly inoperative and therefore lacks utility. More specifically, the Office Action states that claims 1, 12, 20 and 32 contain the phrase "all the records are linked to one another in a dual closed loop structure" which makes the claimed invention inoperative "[s]ince all the records have to be linked to one another and dual closed loops are not connected to each other, it is not possible to link all the records together in a dual closed loop structure." Applicant respectfully disagrees.

Claims 1, 12, 20 and 32 have been amended to further clarify the invention as described in the specification and drawings:

. . . all the records are linked in a dual closed-loop structure to represent the assets and asset related items (1) in ***a hierarchical manner forming a first closed-loop*** in accordance with one or more business interconnection rules of the infrastructure that define how the assets and asset related items are interconnected, (2) in ***a life cycle forming a second closed-loop*** of the assets and asset related items and (3) how one or more persons use the assets and asset related items or how one or more persons use the information stored in the one or more data fields associated with the assets and asset related items, such that ***a record for each asset or asset related item is linked to one or more records in the first closed-loop and one or more records in the second closed-loop.*** . . .

Each loop of the dual-loop structure, the linkage of the records and the intersection of the closed loops are now specifically identified in the claims.

As pointed out in Applicant's previous response, the specification and drawings disclose the dual closed loops, how they intersect, and how the records in the database match these relationships. The previous discussion of FIGURE 6A was only one example. Another example is disclosed in paragraphs [0004], [0060] – [0069] and Figures 4A-4D. More specifically, paragraph [0069] and Figure 4D clearly shows database records organized in two loops:

1. The hierarchical loop is depicted through records 426, 419, 418 and 420. These records define how the Router asset physically connects within the infrastructure.
2. The life-cycle loop is depicted through records 422, 424 and 425. These records define when the Router asset was leased, maintained and repaired.

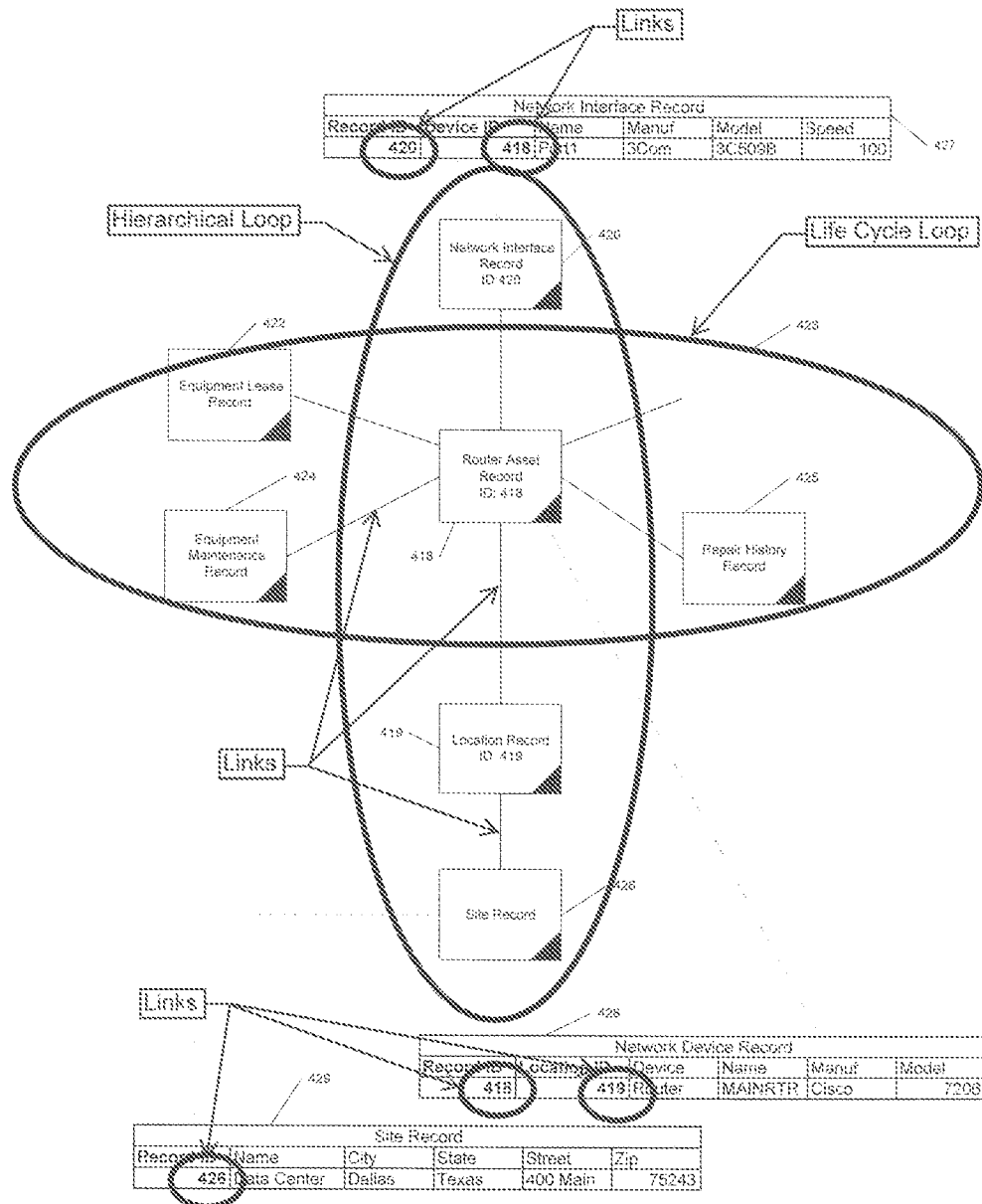


FIG. 4D

The hierarchical loop describes the relationship between the Site 426 to the Network Interface 420. This loop encircles the hierarchical relationship between the Router and the Network Interface. The life-cycle loop describes the state changes of the Router over its time within the organization – how it was leased 422, maintained 424, and repaired 425. This loop encircles how has the router changed during since its acquisition by the organization. ***The records within the dual closed-loops intersect and are therefore linked at each asset***, which is Router record 418 in this example. Note that these two loops are on different dimensions – one loop is a relationship on how the assets physically interrelate, and the other loop is a state relationship at points in time. These types of loops can and do intersect.

Also note that a closed loop is not a circle as stated in the Office Action, although even independent circles can intersect and thus be connected. While independent circles may have up to 2 points of intersection, they can still be separate and distinct circles where both circles define a different set of points and are independent of each other as they do not rely on the other circle to exist. A loop can also be defined as “to enfold or encircle in or with something” (Dictionary.com), which is illustrated above in reference to FIGURE 4D. Applicant’s use of the term “closed loop” in the application is consistent with this definition and does mean a circular path per se. ***The hierarchical loop encircles the record of interest in a fashion that relates to how that asset or information physically interconnects. The life-cycle loop encircles the record of interest in a fashion to how that asset or information has changed over time. Each of these independent loops of information intersects with the record of interest.*** These two loops of information can and do intersect. As additional hierarchical and life-cycle loops of information are created on assets in the repository, more inherent checks and balances are formed and the repository becomes more accurate. [0052].

For all the reasons stated above, applicant respectfully submits that linking the records in a dual closed loop structure as recited in claims 1, 12, 20 and 32, as amended, is operative and provides utility when viewed in light of the specification and drawings. Accordingly, applicant respectfully submits that claims 1-5, 10, 12-15, 17-20, 22 and 32-33 are allowable under 35 U.S.C. § 101. Applicant requests that the rejections be withdrawn.

Claim Rejections under 35 U.S.C. § 112, first paragraph

Claims 1-5, 10, 12-15, 17-20, 22 and 32-33 were rejected in the Office Action under 35 U.S.C. § 112, first paragraph, for claiming subject matter that was allegedly not described in the specification. More specifically, the Office Action stated claims 1, 12, 20 and 32 contain the phrase “all the records are linked to one another in a dual closed loop structure” and the term “business interconnection rules” which are not recited in the original disclosure. Applicant respectfully disagrees.

Claims 1, 12, 20 and 32 have been amended to further clarify the invention as described in the specification and drawings. As illustrated above in reference to FIGURE 4D, ***the records are linked to one another by the identification numbers contained in the records***. Within the hierarchical loop, Router Asset Record ID: 418 is linked to Network Interface Record ID: 420

and Location Record ID 419, which is linked to Site Record 426. Within the life-cycle loop, Router Asset Record ID: 418 is linked to Equipment Lease Record 422, Equipment Maintenance Record 424 and Repair History Record 425. As a result, the records are not linked in physical loop structure as suggested in the Office Action; but are instead, ***linked together logically to reflect the hierarchical nature of the infrastructure, each asset's relationship to the infrastructure and each asset's life cycle. The logical structure of the records can, therefore, be multi-dimensional.*** This is clearly shown and would be readily apparent and understood by one skilled in the art in the design of relational databases involving asset management.

While the actual words “dual closed loop” are only mentioned twice, the two specific loops (a hierarchical loop and a life-cycle loop), or closed-loops are fully described in numerous paragraphs [0004] [0005] [0006] [0007] [0016] [0017] [0023] [0025] [0027] [0028] [0029] [0033] [0034] [0039] [0042] [0043] [0066] [0067] [0069] [0070] [0071] [0076] [0077] and FIGURES 4B, 5 and 6A. More specifically, the specification and Figure 4B clearly define that the records are arranged in the dual closed loop manner:

“a hierarchical fashion patterned after ...” [0004];

“all of the records are linked to one another in a closed-loop hierarchical manner ...” [0028];

“Again, the data is stored in a hierarchical relationship ...” [0038];

“creating each record and storing the record in the database in a closed-loop hierarchical manner ...” [0039];

“The relationship of how one data element interrelates to the other data elements is the added information value.” [0067]; and

“a closed loop of information is created if all infrastructure elements are put into the system and linked to each other in a manner, as the assets are physically interrelated ...” [0071].

When hierarchy and life-cycle information are stored together, as described in the specification and drawings, the resulting repository has inherent checks and balances. It is simpler, less complex, and more accurate than generic asset management systems that do not rely on the hierarchy in an infrastructure [0004]. Applicant, therefore, respectfully submits that the phrase “all the records are linked in a dual closed loop structure” is fully described in the specification in such a way to reasonably convey to one skilled in the art of relational database design and asset management that the inventor, at the time the application was filed had possession of the claimed invention and is not new matter. Accordingly, applicant respectfully submits that claims 1-5, 10, 12-15, 17-20, 22 and 32-33, as amended, are allowable under 35 U.S.C. § 112, first paragraph. Applicant requests that the rejections be withdrawn.

In addition, applicant respectfully submits that the terminology or concepts of “business interconnection rules” or “interconnection rules” are described in the original disclosure:

...all of the records are linked to one another in a closed-loop hierarchical manner in accordance with one or more business rules. . . . The one or more business rules define how the assets and asset related items are interconnected or how one or more users use the assets and asset related items or how one or more users use the information stored in the one or more data fields associated with the assets and asset related items. [0005]

This exact language is repeated in paragraphs [0006] [0007] [0025] and defines three types of business rules:

Business interconnection rules – “how the assets and asset related items are interconnected”;

Business usage rules – “how one or more users use the information”; and

Business information rules – “how one or more users use the information”.

Applicant consistently used the term “business rules” to include the rule on how the assets interconnect; hence “business interconnection rules” or “interconnection rules”. A more detailed definition of “business interconnection rules” is given in paragraphs [0034] and [0061]. Business interconnection rules “are defined based on the technology used in the infrastructure system, or they are sometimes defined by the managing agency” [0034]. Business interconnection rules seldom change [0062]. Paragraph [0061] positively describes how business interconnection rules are defined.

Applicant, therefore, respectfully submits that the term “business interconnection rules” is fully described in the specification in such a way to reasonably convey to one skilled in the art of relational database design and asset management that the inventor, at the time the application was filed had possession of the claimed invention and is not new matter. Accordingly, applicant respectfully submits that claims 1-5, 10, 12-15, 17-20, 22 and 32-33, as amended, are allowable under 35 U.S.C. § 112, first paragraph. Applicant requests that the rejections be withdrawn.

[Left Blank Intentionally]


Conclusion

For the reasons set forth above, applicant respectfully requests reconsideration by the examiner and withdrawal of the restriction requirement. Applicant submits that claims 1-5, 10, 12-15, 17-20, 22 and 32-33 are fully patentable. Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If the examiner has any questions or comments, or if further clarification is required, it is requested that the examiner contact the undersigned at the telephone number listed below.

Date: September 19, 2007

Respectfully submitted,

CHALKER FLORES, LLP

By 

Daniel J. Chalker
Reg. No. 40,552
Tel.: (214) 866-0001
Fax: (214) 866-0010

2711 LBJ Frwy
Suite 1036
Dallas, Texas 75234